

Application No.: 10/767,029
Amendment and RCE dated: February 22, 2007
Reply to Office Action dated: September 22, 2006

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AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A system for manufacturing a hard disk drive arm comprising:
a U-shaped connector to couple a relay flexible cable to a voice coil carriage assembly,
said U-shaped connector including a plurality of generally parallel plates, wherein
said parallel plates include at least one bonding pad to electrically couple said relay
flexible cable to a head gimbal assembly (HGA) flexure cable wherein said parallel plates
include a plurality of opposing tabs.
2. (Cancelled)
3. (Currently Amended) The system of ~~claim 2~~ claim 1, wherein said voice coil carriage
assembly has a plurality of grooves, said grooves being located on opposite sides of the voice coil
carriage assembly.
4. (Original) The system of claim 3, wherein said grooves are shaped and located to accept
said tabs.
5. (Original) The system of claim 1, wherein said U-shaped connector includes at least one
alignment hole and said voice coil carriage assembly includes at least one alignment pin, said
alignment hole shaped and located to accept said alignment pin.

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6. (Original) The system of claim 1, wherein said bonding pad is to be coupled to at least one connecting pad on said HGA flexure cable by a conductive bonding agent.
7. (Original) The system of claim 6, wherein said bonding agent includes a plurality of electrically conductive particles.
8. (Original) The system of claim 7, wherein said bonding agent is to be compressed between said bonding pad and said connector pad, a number of said particles to form an electrical path between said bonding pad and said connector pad.
9. (Original) The system of claim 8, wherein said bonding agent is Anisotropic Conductive Film (ACF).
10. (Original) The system of claim 1, wherein said voice coil carriage assembly is molded polymer resin.
11. (Original) The system of claim 1, wherein said voice coil carriage assembly is stamped aluminum.
12. (Original) The system of claim 1, wherein said U-shaped connector has four bonding pads and said HGA flexure cable has four connecting pads.

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13. (Original) The system of claim 12, wherein said bonding pads and said connecting pads are gold coated.

14-26 (Cancelled)

27. (Original) A system for manufacturing a hard disk drive arm comprising:

a U-shaped connector to couple a relay flexible cable to a voice coil carriage assembly, said U-shaped connector including a plurality of generally parallel plates, said parallel plates including a plurality of opposing tabs, wherein

said voice coil carriage assembly has a plurality of grooves shaped and located to accept said tabs; and

said parallel plates include at least one bonding pad to electrically couple said relay flexible cable to a head gimbal assembly (HGA) flexure cable.

28. (Original) The system of claim 27, wherein said U-shaped connector includes at least one alignment hole and said voice coil carriage assembly includes at least one alignment pin, said alignment hole shaped and located to accept said alignment pin.

29. (Original) The system of claim 27, wherein said bonding pad is to be coupled to at least one connecting pad on said HGA flexure cable by a conductive bonding agent.

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30. (Original) The system of claim 29, wherein said bonding agent is Anisotropic Conductive Film (ACF).

31. (New) A system for manufacturing a hard disk drive arm comprising:
a U-shaped connector to couple a relay flexible cable to a voice coil carriage assembly,
said U-shaped connector including a plurality of generally parallel plates, wherein
said parallel plates include at least one bonding pad to electrically couple said relay
flexible cable to a head gimbal assembly (HGA) flexure wherein said U-shaped connector
includes at least one alignment hole and said voice coil carriage assembly includes at least one
alignment pin, said alignment hole shaped and located to accept said alignment pin.

32. (New) The system of claim 31, wherein said parallel plates include a plurality of
opposing tabs

33. (New) The system of claim 32, wherein said voice coil carriage assembly has a plurality
of grooves, said grooves being located on opposite sides of the voice coil carriage assembly.

34. (New) The system of claim 33, wherein said grooves are shaped and located to accept
said tabs.

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35. (New) The system of claim 31, wherein said bonding pad is to be coupled to at least one connecting pad on said HGA flexure cable by a conductive bonding agent.

36. (New) The system of claim 35, wherein said bonding agent includes a plurality of electrically conductive particles.

37. (New) The system of claim 36, wherein said bonding agent is to be compressed between said bonding pad and said connector pad, a number of said particles to form an electrical path between said bonding pad and said connector pad.

38. (New) The system of claim 37, wherein said bonding agent is Anisotropic Conductive Film (ACF).

39. (New) The system of claim 31, wherein said voice coil carriage assembly is molded polymer resin.

40. (New) The system of claim 31, wherein said voice coil carriage assembly is stamped aluminum.

41. (New) The system of claim 31, wherein said U-shaped connector has four bonding pads and said HGA flexure cable has four connecting pads.

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42. (New) The system of claim 41, wherein said bonding pads and said connecting pads are gold coated.